



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/731,882      | 12/09/2003  | James Rohl           | 279.630US1          | 6739             |

21186 7590 12/09/2010  
SCHWEGMAN, LUNDBERG & WOESSNER, P.A.  
P.O. BOX 2938  
MINNEAPOLIS, MN 55402

|          |
|----------|
| EXAMINER |
|----------|

NGUYEN, PHONG H

|          |              |
|----------|--------------|
| ART UNIT | PAPER NUMBER |
|----------|--------------|

3724

|                   |               |
|-------------------|---------------|
| NOTIFICATION DATE | DELIVERY MODE |
|-------------------|---------------|

12/09/2010

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

uspto@slwip.com  
request@slwip.com

|                              |                                      |                                    |  |
|------------------------------|--------------------------------------|------------------------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/731,882 | <b>Applicant(s)</b><br>ROHL ET AL. |  |
|                              | <b>Examiner</b><br>PHONG H. NGUYEN   | <b>Art Unit</b><br>3724            |  |

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 28 September 2010.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 10-12 and 53-66 is/are pending in the application.
- 4a) Of the above claim(s) 53-56 and 58-63 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 10-12, 57 and 64-66 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Drawings***

1. The Applicant is suggested to provide a three dimensional view of Fig. 7B for better illustrating the invention.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 10, 12, 64 and 65 are rejected under 35 U.S.C. 103(a) as being unpatentable over the Tsubota (5,361,660) in view of Dunwoody et al. (5,678,439), hereinafter Dunwoody.

Tsubota discloses placing sheet A between punch 3 and die 7, 11; die hole is in the center of element 7, through which punch 3 passes; delivering lubricant via element 21 as shown in figure 1; actuating the punch as shown in figure 2; the element A in figure 2, which is shown passing through elements 7 and 11 is considered to be an electrode layer for a flat capacitor; the sheet is aluminum as disclosed in column 4, line 31; aluminum sheets inherently have an aluminum oxide portion due to the sheets exposure to air as evidenced by Frank et al (2,854,074) in column 1, line 27-29; the portions of the aluminum sheet that are exposed to air and have aluminum oxide on them are considered to be distinct portions; the aluminum portion of the sheet is considered to be a distinct aluminum portion; the lubricant is concentrated on the

Art Unit: 3724

periphery of the die hole where the punch cuts through the aluminum portion as shown in figure 1, and each location about the periphery of the die hole is considered to be a specific predetermined location on the periphery of the die hole.

Tsubota does not teach the die hole having a lubricant dam having a ridge extending around a periphery of an open upper end of the die hole, the ridge having an opening to the interior of the die hole and a reservoir behind the ridge; and delivering a lubricant to the lubricant dam by an opening on the dam.

Dunwoody teaches a die hole having a lubricant dam having a ridge extending around a periphery of an open upper end of the die hole, the ridge having an opening 50 to the interior of the die hole and a reservoir 30 behind the ridge 40; and delivering a lubricant to the lubricant dam by an opening 60 for cooling, washing and lubricating. See Fig. 1.

Therefore, it would have been obvious to one skilled in the art at the time the invention was made to incorporate a lubricant dam as taught by Dunwoody to the Tsubota's die for delivering lubricant to a workpiece to reduce heat.

Regarding the limitation of an opening on the ridge, see element 50 Fig. 1 in Dunwoody.

4. Claims 11 and 66 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsubota (5,361,660) in view of Dunwoody et al. (5,678,439), hereinafter Dunwoody as applied to claims 10 and 65 above, and further in view of Klint et al (3,288,715), hereafter Klint.

Tsubota discloses everything as noted above, but does not disclose delivering a partially fluorinated fluid, however, Klint teaches delivering a partially fluorinated fluid in column 2, lines 2-4.

Therefore, it would have been obvious to one skilled in the art at the time the invention was made to deliver a partially fluorinated fluid in Tsubota as taught by Klint in order to obtain a bright surface on the fabricated aluminum.

5. Claim 57 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tsubota (5,361,660) in view of Dunwoody et al. (5,678,439), hereinafter Dunwoody as applied to claim 10 above, and further in view of 3M.

Tsubota discloses everything, but the partially fluorinated fluid is not Fluorinert fluid, however, 3M teaches the advantages of delivering Fluorinert fluid.

Therefore, it would have been obvious to one skilled in the art at the time the invention was made to deliver a Fluorinert fluid in Tsubota and Klint as taught by 3M in order to use a lubricant that does not contribute to ground-level smog formation.

### ***Response to Arguments***

6. Applicant's arguments with respect to drawing objection and 35 USC 112 rejection have been fully considered and are persuasive. The drawing objection and the 35 USC 112 rejection have been withdrawn.

7. Applicant's arguments with respect to claim 10 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to PHONG H. NGUYEN whose telephone number is (571)272-4510. The examiner can normally be reached on Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Boyer Ashley can be reached on 571-272-4502. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Phong H Nguyen/  
Examiner, Art Unit 3724  
December 6, 2010